Message

From: Dan Pope [DPope@css-inc.com]
Sent: 12/22/2016 6:05:23 PM
To: Davis, Eva [Davis.Eva@epa.gov]
Subject: RE: NSZD

I'd have to look at their calculations and discussions to understand exactly what they claim to be doing. For instance, are they talking rates or actual kilograms? Just looking at the bare numbers you provide as rates, my first inclination would be to say that source dissolution is a big bottleneck there. That is, if the bugs can degrade much more per year than can move from source to GW, then there's a bottleneck. But I assume there's more to it than that.

Of course there are immediate questions about how they could even measure those things, false precision, etc.

Anyway, it's interesting that even though the guidance makes a lot of noise about bugs directly degrading napl, they always put in lots of qualifiers, and never claim that practically speaking the bugs are actually doing that.

From: Davis, Eva [Davis.Eva@epa.gov]
Sent: Thursday, December 22, 2016 11:31 AM
To: Dan Pope
Subject: RE: NSZD

These were the calculations in an RI/FS I'm reviewing - calculations were supposedly done per the ITRC guidance

-----Original Message-----
From: Dan Pope [mailto:DPope@css-inc.com]
Sent: Wednesday, December 21, 2016 4:16 PM
To: Davis, Eva <Davis.Eva@epa.gov>
Subject: RE: NSZD

Were the calculations for that site in the ITRC's guidance, or somewhere else?

From: Davis, Eva [Davis.Eva@epa.gov]
Sent: Tuesday, December 20, 2016 1:02 PM
To: Dan Pope
Subject: NSZD

Dan -

are you familiar with ITRC's natural source zone depletion guidance? I'm looking at some calculations now for a particular site (not Williams) where they say the source zone mass dissolution rate is 25 kg/yr, and the biodegradation rate is 104.6 kg/year. If biodegradation has to take place in the dissolved phase, how can the biodegradation rate be greater than the dissolution rate?